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10/630,419	07/30/2003	William Randolph Schmidt	MP0974(13036/15)	7838
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EXAMINER MCLEAN, NIEL R				
ART UNIT 2625		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/630,419

Applicant(s)

SCHMIDT, WILLIAM RANDOLPH

Examiner

Neil R. McLean

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-52 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 36-52 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/CDC)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Election/Restrictions

1. Claims 21-35 and 53-61 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claims. Election was made **without** traverse in the reply filed on 1/03/2008.

Response to Arguments

2. Applicant's arguments, see Amendment, filed 9/21/2007, with respect to the rejection(s) of claim(s) 36-52 under Honma (US 7,130,069) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of LeClair et al. (US 7,069,341).

Regarding Applicants Argument:

"Honma does not disclose a printer having a print server that manages a print queue".

Examiner's Response:

Honma discloses the printer formatter of claim 36 disclosed above, including a printer formatter comprising a substrate having the processor, the system I/O, and the formatter controller located thereon (100 in Figure 1).

Honma does not disclose expressly wherein the print server is located thereon.

LeClair discloses wherein the print server is located thereon **(If the output device is a printer with embedded server or controller, similar to I/O device 350 of FIG. 3, initiator 700 may submit the request directly to the enhanced printer as described in Column 9, lines 39-50).**

Honma & LeClair are combinable because they are from the same field of endeavor, e.g., both references disclose network printers.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the print server within the printer.

The suggestion/motivation for doing so would be to save money and bandwidth by not using the network server.

Therefore, it would have been obvious to combine LeClair with Honma to obtain the invention as specified

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 36, and 40-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Honma (US 7,130,069).

Regarding Claim 36:

Honma discloses a printer formatter comprising:

a processor to perform at least a first print function associated with a print job (323 in Figure 4);

a system input/output (I/O) associated with the processor to receive an input signal (320 in Figure 4) and provide an output signal (322 in Figure 4);

a formatter controller to perform at least a first formatting function associated with the print job (321 in Figure 4); and

a print server (Core section 10 in Figure 1), in communication with the processor, to manage a print queue (5 in Figures 1 and 4).

Regarding Claim 40:

Honma discloses the printer formatter of claim 36 wherein the system I/O is adapted to receive the print job (See Network Interface 7 in Figures 1 and 4).

Regarding Claim 41:

Honma discloses the printer formatter of claim 36 wherein the formatter controller is adapted to convert the print job from a first format to a second format (See block diagram of image processor in Figure 5).

Regarding Claim 42:

Honma discloses the printer formatter of claim 36 wherein the formatter controller is adapted to compress the print job (Column 4, lines 35-37).

Regarding Claim 43:

Honma discloses the printer formatter of claim 36 wherein the formatter controller is adapted to de-compress the print job (Column 4, lines 43-45).

Regarding Claim 44:

Honma discloses the printer formatter of claim 36 wherein the system I/O is adapted to generate an I/O interrupt in response to receiving the input signal, and the processor is adapted to perform an I/O function in response to receiving the I/O interrupt (Column 7, lines 27-32).

Regarding Claim 45:

Honma discloses the printer formatter of claim 44 wherein the I/O function includes receiving and storing the print job (Column 4, line 65 – Column 5, line 4).

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Regarding Claim 46:

Honma discloses the printer formatter of claim 44 wherein the I/O function includes providing an indication to the print server that the print job has been received (Column 7, lines 27-32).

Regarding Claim 47:

Honma discloses the printer formatter of claim 36 wherein the print server is adapted to generate a print server interrupt in response to detecting the print job, and the processor is adapted to perform a print server function in response to receiving the print server interrupt (Column 7, lines 27-32).

Regarding Claim 48:

Honma discloses the printer formatter of claim 36 wherein the processor is adapted to store the print job in the print queue (See File Section 5 in Figures 1 and 4).

Regarding Claim 49:

Honma discloses the printer formatter of claim 36 wherein the processor is adapted to provide a print job status notification. This feature is inherent under the Simple Network Management Protocol (SNMP) and Management Information Base (MIB) in order to facilitate the exchange of management information between network devices.

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Regarding Claim 50:

Honma discloses the printer formatter of claim 36 wherein the processor is adapted to provide a print job complete notification. This feature is inherent under the Simple Network Management Protocol (SNMP) and Management Information Base (MIB) in order to facilitate the exchange of management information between network devices.

Regarding Claim 51:

Honma discloses the printer formatter of claim 36 wherein the processor is adapted to provide a print error notification. This feature is inherent under the Simple Network Management Protocol (SNMP) and Management Information Base (MIB) in order to facilitate the exchange of management information between network devices.

Regarding Claim 52:

Honma discloses the printer formatter of claim 36 wherein the processor is adapted to remove the print job from the print queue in response to a cancel signal. This feature is inherent under the Simple Network Management Protocol (SNMP) and Management Information Base (MIB) in order to facilitate the exchange of management information between network devices.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honma (US 7,130,069) as applied to claim 36 above, and further in view of LeClair (US 7,069,341).

Regarding Claim 37:

Honma discloses the printer formatter of claim 36 disclosed above, including a printer formatter comprising a substrate having the processor, the system I/O, and the formatter controller located thereon (100 in Figure 1).

Honma does not disclose expressly wherein the print server is located thereon.

LeClair discloses wherein the print server is located thereon **(If the output device is a printer with embedded server or controller, similar to I/O device 350 of FIG. 3, initiator 700 may submit the request directly to the enhanced printer as described in Column 9, lines 39-50).**

Honma & LeClair are combinable because they are from the same field of endeavor, e.g., both references disclose network printers.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the print server within the printer.

The suggestion/motivation for doing so would be to save money and bandwidth by not using the network server.

Therefore, it would have been obvious to combine LeClair with Honma to obtain the invention as specified in claim 37.

7. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honma & LeClair as applied to claim 37 above, and further in view of Chadez et al. (US 6,522,420)

Regarding Claim 38:

Honma & LeClair disclose all of the subject matter disclosed in Claim 37 above.

Honma & LeClair do not disclose expressly printer firmware for specifically having a single microchip that includes the processor, the system I/O, the formatter controller and the print server.

Chadez et al. disclose expressly printer firmware for specifically having a single microchip that includes the processor, the system I/O, the formatter controller and the print server. **(A printer performs both the processing and printing tasks efficiently using controller firmware with a single data path (i.e., one ASIC) as described in Column 2, lines 45-51).**

Honma, LeClair and Chadez are combinable because they are from the same field of endeavor; e.g., all references disclose network printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the Application Specific Integrated Circuit (ASIC) as taught by Chadez et al. into the print processing system disclosed by Honma and LeClair.

The suggestion/motivation for doing so would have been to provide customers with the benefits of scalable performance, fast time to market, low system cost, and flexible, system-on-chip platforms that translates into faster time to market and longer time in market for customers. Having a printer that interleaves printing operations with non-printing operations during the printing and non-printing phases of the print cycle takes advantage of the non-printing phase to compress the raster data and other general operations.

Regarding Claim 39:

Chadez further discloses the printer formatter of claim 38 wherein the microchip is configured to function within a printer (Column 2, lines 45-51).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Okano (US 5,987,225) discloses a network including printing devices capable of processing both copying jobs and printing jobs, and also relates to a print output control device for performing various controls such as setting an operation mode of each printing device, assigning requested printing jobs to the printing devices.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is (571)270-1679. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571.272.7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Neil R. McLean/
Examiner, Art Unit 2625
3/19/2008

/Gabriel I Garcia/

Acting SPE of Art Unit 2625